

MANIA K. BAGHDADI
ANNE GOODWIN CRUMP
VINCENT J. CURTIS, JR.
THOMAS J. DOUGHERTY, JR.
JAMES G. ENNIS
RICHARD HILDRETH
EDWARD W. HUMMERS, JR.
FRANK R. JAZZO
BARRY LAMBERGMAN
PATRICIA A. MAHONEY
GEORGE PETRUTSAS
ROBERT D. PRIMOSCH
LEONARD R. RAISH
JAMES P. RILEY
DAVID N. ROBERTS*
MARVIN ROSENBERG
LONNA M. THOMPSON
HOWARD M. WEISS

*ADMITTED IN TEXAS ONLY

FLETCHER, HEALD & HILDRETH

ATTORNEYS AT LAW

SUITE 400, 1225 CONNECTICUT AVENUE, N.W.

WASHINGTON, D.C. 20036-2679

P. O. BOX 33847

WASHINGTON, D.C. 20033-0847

(202) 828-5700

TELECOPIER NUMBER

(202) 828-5786

ORIGINAL

ORIGINAL
FILE

PAUL D.P. SPEARMAN
(1936-1982)
FRANK ROBERSON
(1936-1981)

RETIRED
RUSSELL ROWELL
EDWARD F. KENEHAN
ROBERT L. HEALD
FRANK U. FLETCHER

TELECOMMUNICATIONS CONSULTANT
HON. ROBERT E. LEE

WRITER'S NUMBER
(202) 828-

5710

July 17, 1992

RECEIVED

JUL 17 1992

Ms. Donna R. Searcy
Secretary
Federal Communications Commission
1919 M Street, N.W.
Room 222
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

RE: RM-8004

Dear Ms. Searcy:

Transmitted herewith on behalf of Harris Corporation - Farinon Division are an original and nine copies of its Reply Comments on the above-referenced Petition for Rule Making filed by Alcatel Network Systems, Inc.

Respectfully submitted,

Barry Lambergman

Barry Lambergman
Counsel for
Harris Corporation -
Farinon Division

BL/es
Enclosure

No. of Copies rec'd 049
List A B C D E

RECEIVED

JUL 17 1992

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of
Amendment of Parts 2, 21, 25 and 94
of the Commission's Rules to
Accommodate Common Carrier
and Private Op-Fixed Microwave
Systems in Bands Above 3 GHz

RM - 8004

To: The Commission

REPLY COMMENTS OF HARRIS CORPORATION - FARINON DIVISION

Harris Corporation - Farinon Division ("Harris"), by its attorneys, hereby replies to the comments submitted in response to the above-captioned Petition for Rule Making filed by Alcatel Network Systems, Inc.

As Harris noted in its initial comments, the groundwork laid in the Alcatel Petition provides a good starting point for the development of the technical rules needed to enable both existing and future common carrier and private operational-fixed users to use the bands above 3 GHz in lieu of the 2 GHz band should that become necessary. However, Harris went on to urge that in light of the complex and comprehensive scope of the regulatory overhaul necessary to accomplish this, the most prudent course is to temporarily hold the Alcatel Petition in abeyance while an industry advisory committee considers the many complex technical issues involved in this endeavor. Harris noted that not only would an industry advisory committee be able to forge an industry consensus on many of these technical issues, the negotiation and

compromise that can take place in an industry advisory committee setting would be an effective means of ensuring that the standards ultimately proposed in a rule making proceeding adequately accommodate the needs of both common carrier and private operational-fixed users.

While the comments filed in response to Alcatel's Petition generally agree that there is a need for new technical rules governing use of the bands above 3 GHz and that the Commission should proceed to rule making,¹ Harris observes that there is disagreement on several fundamental issues. In Harris's view, the interests of all concerned would best be served by trying to resolve some of those differences in the context of an industry advisory committee prior to the issuance of a notice of proposed rule making.²

For example, one fundamental issue on which there is substantial disagreement is how the bands above 3 GHz should be

¹ Communications Transmission, Inc. ("CTI") argues that a rule making proceeding would be premature because no migration of present licensees is contemplated by the Commission for at least ten years. Opposition of CTI at 4-5. To some extent, CTI may have a valid point in terms of the urgency of the situation, particularly in light of the Commission's Public Notice dated May 14, 1992. Nevertheless, CTI loses sight of the fact that applicants for new point-to-point microwave systems, particularly private operational-fixed systems, are already faced with having to operate in the bands above 3 GHz because otherwise they would be subject to secondary status in the 2 GHz band.

² In addition to Harris, a number of commenters also noted the need for additional time to analyze the complex issues raised by the Alcatel Petition. See Comments of Comsearch at 5, Opposition of Hughes Communications Galaxy, Inc. ("HCG") at 3n.2. An industry advisory committee would provide the opportunity for such further analysis.

channelized. Whereas common carrier interests generally oppose the partitioning of wideband channels,³ private operational-fixed interests, with their lower capacity requirements, point out that there is a need to establish a number of narrowband channels in the common carrier bands.⁴ Given the declining use of wideband microwave channels by common carriers, this is clearly an area that needs thorough exploration. Development of further information on this matter prior to the issuance of an NPRM is vital and would help ensure that the rules ultimately proposed in an NPRM would balance adequately the current and future needs of common carrier and private microwave users."⁵

A related issue on which there is disagreement among the commenters and which bears directly on how the bands above 3 GHz

³ See Comments of MCI Telecommunications Corporation ("MCI") at 5; Comments of Pacific Telesis Group ("Telesis") at 3; Opposition of CTI at 11.

⁴ See Comments of Utilities Telecommunications Council ("UTC") at 4; Comments of the American Petroleum Institute ("API") at 9; Comments of Telecommunications Industry Association ("TIA") at 3. In Harris's view, the fact that the use of microwave radio as the prime communications channel between switching centers is decreasing indicates that common carrier usage of the 3.7-4.2, 5.9-6.4 and 10.7-11.7 GHz allocations is for lighter cross-sections where economics favor microwave over fiber. This fact supports Alcatel's proposals to carve narrowband channels out of some of the wideband channels in the 4 and 6 GHz bands and to assign the 10.55-10.68 DTS frequencies for point-to-point use. Such bandwidths would be useful not only in serving the private operational-fixed market, but the cellular telephone industry as well.

⁵ The development of such information would ultimately inure to the benefit of wideband users by ensuring "that as few wideband channels as possible are used to support narrowband systems in any geographic area." Comments of National Spectrum Managers Association ("NSMA") at 2.

should be channelized is the amount of spectrum that should be shared on a co-primary basis between common carrier and private operational-fixed users. Harris noted in its comments, for example, that because the Commission's proposed reallocation of the 2 GHz band would result in Part 94 users losing four and one-half times more spectrum than Part 21 users, the Commission may want to consider allowing Part 94 users to share spectrum under Part 74 on a co-primary basis.⁶ In this connection, Microwave Radio Corporation ("MRC") notes that with the widespread deployment of fiber optics, the "4, 6 and 11 GHz bands are no longer essential to common carriers" and that, therefore, "they may be unable to argue that sharing these bands with private microwave users will deprive them of capacity they need for service to their customers."⁷

A number of common carrier commenters, on the other hand, view the Commission's reallocation plan and Alcatel's proposals as being more to the disadvantage of common carriers than private operational-fixed users. MCI states that whereas common carriers now have 2070 MHz available on an exclusive basis, they would share 2580 MHz with other users on a co-primary basis under Alcatel's proposal.⁸ Telesis notes that excluding the 4 GHz band, private users would contribute 350 MHz in the upper 6 GHz

⁶ Harris Comments at 4-5. See also Comments of Telecommunications Industry Association ("TIA") at 2 (supporting the concept of sharing the Part 74 bands).

⁷ Comments of MRC at 3.

⁸ Comments of MCI at 6.

band while common carriers would contribute 500 MHz in the lower 6 GHz band and 1,000 MHz in the 11 GHz band. Telesis argues that common carrier bands should remain dedicated to common carriers.⁹

Similarly, there is substantial disagreement on whether and how much spectrum from the 4 GHz band should be included in the reallocation plan. GTE Service Corporation, Telesis, GE American Communications, Inc., HCG, and Home Box Office strongly oppose Alcatel's proposal to reallocate a portion of the 3.7-4.2 GHz band. Others, such as API, UTC, the Association of American Railroads, MRC and Harris generally support Alcatel's proposals.¹⁰

Unfortunately, the record thus far established in this proceeding does not provide sufficient information on the future spectrum needs of common carrier and private microwave users. As noted above, changes in technology and the economics thereof will impact on such spectrum requirements. For example, Harris agrees with MRC that common carriers have made increasing use of fiber for broadband long haul circuits and that, consequently, their dependence on point-to-point microwave has diminished over the

⁹ Comments of Telesis at 2.

¹⁰ Harris agrees with API that it is imperative that some additional spectrum below 6 GHz be made available to systems currently licensed in the 2 GHz band and that, as Alcatel proposed, the 3.6-3.7 GHz band should be considered for this purpose. Statement of API at 9. As Harris noted in its comments, in addition to 3.6-3.7 GHz, the Commission should also consider making available to displaced users the 100 MHz from 3.5 to 3.6 MHz. Comments of Harris at 7 n.4.

years. Similarly, the fact that recent trends in video digitization and compression are allowing multiple video programs to be placed over a single satellite transponder offsets to some extent the concerns raised by those commenters who opposed Alcatel's 4 GHz band proposal.

In any event, the point is that in the absence of concrete information on spectrum needs, it will be difficult for the Commission to determine the amount of spectrum and the specific bands to be shared between common carrier and private operational-fixed users and, more importantly, to determine how many channels should be set aside to accommodate low, medium and high capacity spectrum requirements. In Harris's view, it is essential that such information be developed prior to proposing channelization plans in an NPRM. This information can either be developed by an industry advisory committee or the Commission could seek additional comments for this limited purpose.

The comments indicate that some of the issues raised by the Alcatel Petition are already the subject of discussion in industry groups. For example, NSMA notes that it is currently engaged in discussions with TIA in an attempt to resolve issues of mutual concern to common carrier and private interests.¹¹ In Harris's view, it is not important whether an industry advisory committee takes the form of a new body or is folded into existing industry organizations, such as NSMA or TIA. What is important is that whatever forum in which the necessary discussions take

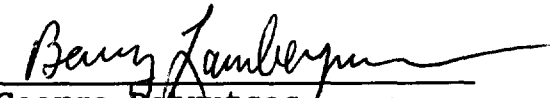
¹¹ Comments of NSMA at 4.

place, all affected interests should be adequately represented.¹² Again, this will go a long way toward ensuring that the rules ultimately proposed by the Commission are based on a solid factual foundation and as broad a consensus as possible.

Respectfully submitted,

HARRIS CORPORATION -
FARINON DIVISION

By:


George Petrutsas
Barry Lambergman

Its Attorneys

FLETCHER, HEALD & HILDRETH
1225 Connecticut Avenue, N.W.
Suite 400
Washington, D.C. 20036
(202) 828-5700

July 17, 1992

¹² See Comments of UTC at 4 (noting that it does not object to TIA developing new interference criteria, so long as private and common carrier representation on the committee is balanced).

CERTIFICATE OF SERVICE

I, Elizabeth Stout, a secretary in the law firm of Fletcher, Heald & Hildreth, do hereby certify that a true copy of the foregoing Reply Comments were mailed this 17th day of July, 1992, by first-class United States mail, postage prepaid, to the following:

Robert J. Miller
Gardere & Wynne, L.L.P.
1601 Elm Street, Suite 3000
Dallas, Texas 75201
Counsel for Alcatel Network Systems, Inc.

Elizabeth Stout
Elizabeth Stout